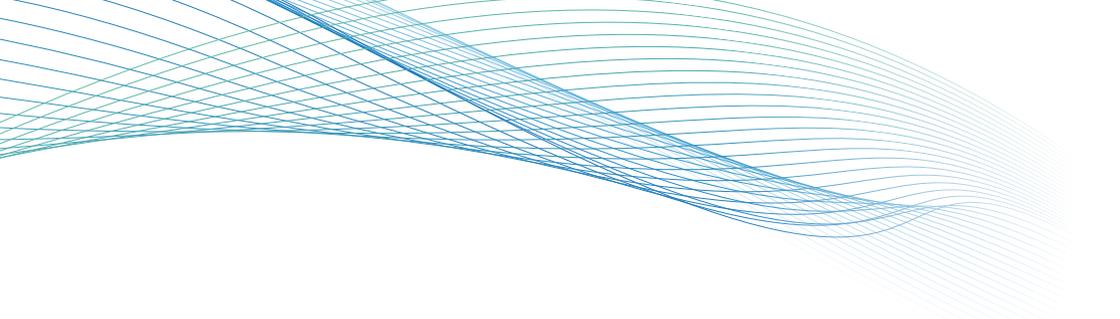




Your guide to

Third Party Costs

February 2020



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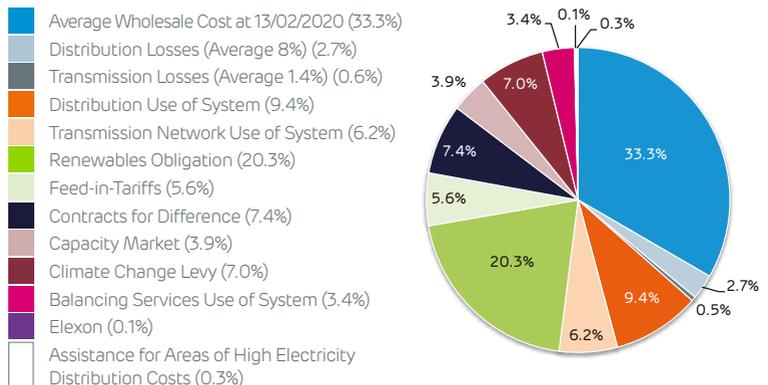
Electricity's less than half of your power bill

Did you know that less than 40% of your energy bill is the cost of your electricity? The remaining 60% is made up of TPCs: Third Party Costs.

The Government's policy-driven charges under the Levy Control Framework (LCF), Control for Low Carbon Levies (CLCL) and network charges are likely to form an increasing proportion of energy consumers' bills. These charges can change from year to year.

The graph below shows what makes up a typical energy bill, using a combination of actual data, published rates and forward-looking estimates. These figures should be used for indicative purposes only.

Cost Breakdown for 2020/21



Transmission Network Use of System (TNUoS)

TNUoS charges recover the cost of installing and maintaining the transmission system in England, Wales, Scotland and offshore.

National Grid owns the electricity network in England and Wales while National Grid ESO (the Electricity System Operator for Great Britain) moves electricity around the system.

However, charges are split by each of the UK's 14 Grid Supply Point groups – which correspond to each DNO's location.

As it stands, HH TNUoS charges are based on a customer's average kW demand during the Triads (the three half-hour settlement periods with the highest system demand that are at least 10 clear days apart between November and February). The Triads aren't completely known until National Grid publishes the dates following the end of the Triad season in March.

NHH TNUoS charges are based on a customer's total consumption between 4.00pm and 7.00pm between April and March. Charges are finalised every January for the following year (April-March). When considering all areas, TNUoS rates remain flat when comparing the 2019/20 to 2020/21 charging years.



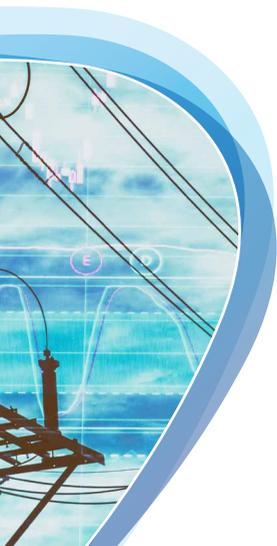
Balancing Services Use of System (BSUoS)

The BSUoS charge recovers the cost (to the System Operator, National Grid ESO) of operating and balancing the electricity system; It also includes the cost of managing the system voltage, frequency, operating reserve and reactive power.

The charge is calculated for each half hour and, as it stands, BSUoS charges are imposed equally on generators and suppliers on a £/MWh basis.

BSUoS charges continue to be volatile; particularly when demand is low and intermittent generation, such as wind turbine output, is high. Additional undersea links have been developed, such as the Western High Voltage Direct Current (HVDC) link between Scotland and Wales, and reliability has been intermittent. This means costs have been unpredictable in the medium term while repairs and investigations take place.

BSUoS costs have significantly increased over the last two years, and at the time of writing (February 2020), we're anticipating the 2019/20 annual charge at £3.50/MWh and £3.90/MWh for 2020/21.



Distribution Use of System (DUoS)

DUoS charges cover the cost of installing, operating and maintaining a safe and reliable electricity supply within each DNO region, and the distribution of electricity from the National Grid, to homes and businesses.

DUoS charges are paid to the Distribution Network Operator (DNO). Each supply meter is on a network run by the DNO for that relevant geographical area, and there are six DNOs operating across 14 regions in the UK.

DNOs' revenue (the total amount they can recover from distribution users) is agreed with Ofgem for price control periods. The current arrangement (RIIO-1) is set to finish in March 2023.

DNOs publish annual (April-March) Charging Statements, 15 months in advance of the charging year starting (2021/22 charging statements were published in January 2019). Distribution charges are a mix of fixed (capacity and fixed) and variable (RAG) charges and generally vary by connection type (Low Voltage, High Voltage and Extra High Voltage) for business customers.

Ofgem approved DCP 268 in April 2019. This modification aligns the charging structure for all low and high voltage demand customers (including domestic) to a three-rate, time of usage charge (commonly known as red/amber/green time bands).

Renewables Obligation (RO)

Before it closed to all new generation in 2017, the RO was the main support framework incentivising the generation – and associated construction – of large-scale renewable electricity in the UK. Eligible generators receive a prescribed amount of Renewables Obligation Certificates (ROCs) for every MWh of renewable generation.

Suppliers fulfil their requirements by presenting Renewables Obligation Certificates (ROCs) to the Office of Gas and Electricity Markets (Ofgem). Alternatively, suppliers can pay Ofgem a published Buy-Out price per ROC for any shortfall.

The effective RO charge is calculated by multiplying the Renewable Obligation by Buy-Out price for the relevant Compliance Period (April-March). Both figures are published on the Ofgem website: [ofgem.gov.uk](https://www.ofgem.gov.uk)

The charge is expected to remain relatively flat over the next few years as the scheme is now closed to new capacity in favour of the CfD Scheme. The 2019/20 charge is £23.61/MWh, and we're forecasting 20/21 in the region of £23.55/MWh.

Consumers who qualify for an Energy Intensive Industries exemption (EII), by obtaining certificates from the Department for Business, Energy and Industrial Strategy (BEIS), can receive up to an 85% exemption at source from the RO, FiT and CfD schemes.

Small Scale Feed-in-Tariffs (ss-FiT)

The ss-FiT subsidy is recovered from suppliers and paid to smaller generators of eligible low carbon and renewable power. The majority of these generators use photovoltaic (PV) panel on rooftops, although a significant proportion of the power comes from solar and wind farms too.

On 18 December 2018, BEIS confirmed its decision to close the FiT scheme to new applicants from 1 April 2019. Payments continue to be due to generators that registered before the scheme's closure to new applicants and the scheme's annual costs are now levelling out at around £1.4 billion.

The Energy Intensive Industry (EII) exemption for the ss-FiT scheme came into effect from April 1st 2019 as planned, following the European Commission granting state aid approval.

We're forecasting the annual Feed-in Tariff (FiT) charge at approximately £6.25/MWh and £6.45/MWh for 2019/20 and 2020/21.



Contracts for Difference Feed-in-Tariff (CfD FiT)

The CfD FiT scheme is the main framework to encourage new low carbon power generation in the UK. It replaces the Renewables Obligation (RO) mechanism - now closed for new generation - as the main vehicle for long-term investment into renewable electricity.

Generators are awarded contracts through an auction, where they agree to a "strike price" for all electricity they generate. If the wholesale price is less than the agreed "strike price", the generator will receive a "top up" payment for its energy. If the market price is higher than the "strike price", suppliers receive a payment. This guarantees generators a certain amount per MWh, which makes funding projects easier.

An Interim Levy Rate (ILR) is set for each quarter, and suppliers are billed by the Low Carbon Contracts Company (LCCC - a company owned wholly by the Secretary of State for BEIS) based upon this rate. At the end of each quarter, the LCCC reconciles the difference between each supplier's daily energy output and the actual ILR. The scheme continues to grow quarter on quarter, as more and more generators come online.

The Q1 2020 ILR is £5.848/MWh, and the Q2 2020 increases to £7.469/MWh.

Capacity Market (CM)

The Capacity Market (CM) was introduced to ensure the UK has enough capacity on the grid to cover peak demands. Historically, these were between 4pm and 7pm, Monday to Friday, November to February.

Under the CM, dispatchable generating assets (for example, those able to be turned up) not remunerated through other schemes are eligible to commit to being available at peak times in the future, in return for a payment. Contracts are awarded through a reverse auction; price starts high and continues to drop until the capacity left falls within an acceptable tolerance. Once the auction clears, all generators receive the £/kW clearing price. Most of the capacity is secured 4 years in advance (i.e. T-4), however a top-up auction is held 1-year head (T-1) to adjust the secured capacity and deal with any exists from the T-4 auction.

Throughout the majority of 2019, the scheme was suspended due to a legal challenge through the European Courts. No payments were made by suppliers, or

to capacity providers, during the standstill period. Following a full investigation in October 2019, the European Commission confirmed its original 2014 decision to grant state aid approval for the Capacity Market. This meant the CM could be restored and required suppliers to make the payments that had been suspended since November 2019.

Like the Contracts for Difference (CfD) scheme, CM costs are broken down into parts: Operational Costs and Supplier Levy. Both charges are based on consumption between 4pm-7pm, Monday to Friday, from November to February, so businesses may save on their energy bills by reducing consumption during this window.

We're forecasting a typical rate of £3.12/MWh for October 2019 to September 2020, and £4.50/MWh for October 2020 to September 2021, but this will vary based on consumption patterns.

Climate Change Levy (CCL)

The CCL is an environmental tax levied on business users to reduce carbon emissions and improve energy efficiency.

However, energy intensive businesses that enter into a Climate Change Agreement (CCA) with the Environmental Agency pay a reduced CCL rate (around 90%). The CCA is a voluntary agreement to reduce energy use and carbon dioxide (CO₂) emissions.

Further reliefs or exemptions are available to small businesses that may not use much energy or where businesses buy energy-efficient technology.

At the time of writing, HM Revenue & Customs (HMRC) hasn't published CCL rates for any period after 2021/22.

| £/MWh | 2019/20 | 2020/21 | 2021/22 |
|-------|---------|---------|---------|
| CCL | 8.47 | 8.11 | 7.75 |

Actuals published by HMRC.

Elexon

Each Balancing and Settlement Code (BSC) party compensates National Grid Company (NGC) for the trading and settlement duties it's performed, paying its share of the costs based on the volume supplied/traded. Effectively, the more involved the BSC party, the larger the share it has to pay.

The current charge totals £0.08/MWh.



Assistance for Areas of High Electricity Distribution Costs (AAHEDC)

AAHEDC is levied on all suppliers to offset the high DUoS costs in certain areas. Currently, this only applies to the north of Scotland, meaning that collected levies are passed onto Scottish Hydro Electric Power Distribution Limited.

Tariffs are published by 15 July each year and take effect from 1 April retrospectively.

| £/MWh | 2019/20 | 2020/21 | 2021/22 |
|--------|---------|---------|---------|
| AAHEDC | 0.26 | 0.38 | 0.43 |

Targeted Charging Review and BSUoS taskforce

TNUoS and DUoS

The energy system is undergoing a radical transformation as decarbonisation, digitisation and decentralisation accelerate.

As a result, the network access and charging methodology must change to ensure they continue to be fit for purpose, protect consumers and aren't distorting the market.

The Office of Gas and Electricity Markets (Ofgem) has introduced two major projects to address how electricity network access and charging should be reformed.

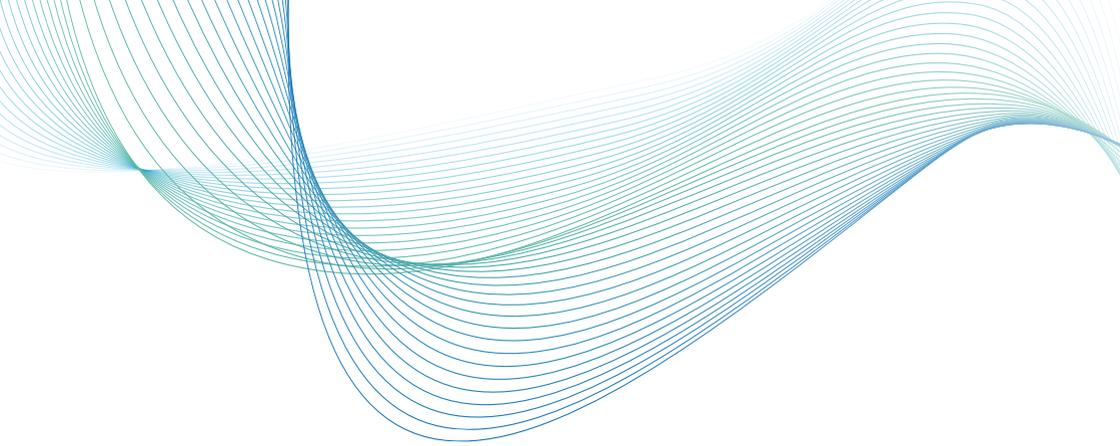
1. Ofgem wants to make sure that we all use electricity networks more efficiently and flexibly. This will mean users can have the access they need, and benefit from new technologies and services, while avoiding unnecessary costs..
2. This work seeks to remove those distortions not covered by Ofgem's existing work on embedded benefits. It also aims to allocate fairly the long-term fixed costs of the network infrastructure being there for when consumers want to use it.



In November 2019, Ofgem confirmed changes on the back of the TCR, deciding to levy long-term fixed costs (residual charges) onto demand users only. This makes residual charges simpler and more transparent. Ofgem also decided to implement a refined version of a fixed charge for the collection of residual network charges (reducing the impact of load shifting). The actual mechanics and methodology are yet to be finalised (watch this space). But the reforms will be introduced in 2021 and 2022 for TNUoS and DUoS respectively.

BSUoS

Several modifications and charging reviews (ongoing at the time of writing) will affect BSUoS charges. These include the investigations by the BSUoS task force – which is looking at who pays balancing costs and how they're recovered – and the impact of CMP308. This modification proposes removing BSUoS charges from generation, with the aim of making it fairer for UK generators (since those importing energy via the interconnectors pay no balancing costs). This could mean that supply customers see their BSUoS costs nearly double as soon as 2022/23 (although this should be offset by a similar reduction in the wholesale price). We anticipate further information on the task force findings and possible changes in the summer of 2020.



Mutualisation and supplier failure

In 2018, 34 suppliers (a record number) failed to both fulfil their RO for the 2017/18 period before the August deadline, or to contribute to the late payment fund.

However, £58.6m remained outstanding, triggering the mutualisation process – designed to recover outstanding payments from the suppliers remaining in the market – for the first time.

Suppliers continued to exit the market in 2019. Industry regulator Ofgem revoked the licences of Solarplicity and URE (also known as Faraday) due to outstanding debt, and Eversmart ceased to trade in September 2019.

In December 2019, Ofgem confirmed that mutualisation had been triggered for the second compliance period in a row, although the total shortfall had nearly doubled to £97.5m. Again, these outstanding payments had to be recovered from the suppliers remaining in the market.

Mutualisation has also affected the Capacity Market, ss-FiT, and CfD schemes, to a lesser extent. DUoS and TNUoS costs unable to be recovered from failed suppliers lead to small increases and adjustments to future charging years through the Supplier of Last Resort (SoLR), and K-factor adjustments respectively.



Glossary

| | |
|---------|---|
| BEIS | The Department for Business, Energy and Industrial Strategy |
| BSUoS | Balancing Services Use of System |
| CCL | Climate Change Levy |
| CDCM | Common Distribution Charging Methodology |
| CfD | Contracts for Difference |
| CfD FIT | Contracts for Difference Feed-in-Tariff |
| CM | Capacity Market |
| CP | Compliance Period |
| DECC | Department of Energy and Climate Change |
| DNO | Distribution Network Operator |
| DSBR | Demand Side Balancing Reserve |
| DUoS | Distribution Use of System |
| DUP | Democratic Unionist Party |
| EII | Energy Intensive Industries |
| EMR | Electricity Market Reform |
| ESO | Electricity System Operator |
| GoOs | Guarantees of Origin |
| HH | Half Hourly |
| ILR | Interim Levy Rate |
| LCCC | Low Carbon Contracts Company |
| LCF | Levy Control Framework |
| NBP | National Balancing Point |
| NHH | Non Half Hourly |
| Ofgem | The office of Gas and Electricity Markets |
| RO | Renewals Obligation |
| ROCs | Renewables Obligation Certificates |
| SBR | Supplemental Balance Reserve |
| ss-FIT | small scale Feed-in-Tariffs |
| TNUoS | Transmission Network Use of System |
| TPCs | Third Party Costs |

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